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SCIENCE

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THE KLAMATH NATION.

III.—MYTHOLOGY AND GENERAL ETHNOLOGY.

THE Klamath mythology, as is generally found to be the case with any mythology belonging to a people who speak a language radically distinct from all other tongues, has peculiar features well worthy of notice and of comparison with other and more widely known forms of belief. The principal deity is K'múkamtch, a name which Mr. Gatschet renders the "Old Man of the Ancients," or the "Primeval Old Man." The expression, "man," however, seems in strictness not to be comprised in it, as we are further informed that it is composed of *kmutch*, "he is old," and the termination *amtch*, having a similar meaning, "old, ancient, primeval, by-gone." "The Most Ancient," or "The Oldest Being," would seem to be the nearest interpretation. He is otherwise designated *P'tishamtch nalam*, "Our Old Father," and *P'laitalkni*, "The One on High." He created the world and all that it contains. Various stories are told of the mode of these creations. According to one account he made plants and animals, including men, by *thinking* and *wishing*, "this probably implying (as Mr. Gatschet suggests) that, after forming an idea of some creature, he made that idea a reality by the strong energy of his will,"—a method which accords with the Mosaic account of creation. Other myths speak of his family, comprising a father, a wife or wives, a daughter, and Aishish, "his son by adoption." "The name of his daughter," we are told, "is not given, but she represents the clouded or mottled evening sky. When (in the myth) she leads him to the underworld, they meet there a vast crowd of spirits, who for five nights dance in a large circle around a fire, and on each of the intervening days are changed into dry bones. K'múkamtch takes with him some of these in a bag, and, when reaching the horizon at day-break, throws the bones around the world, in pairs, and creates tribes from them, the Modocs being the last of these. Then he travels in the path of the sun till he reaches the zenith, builds his lodge, and lives there now with his daughter."

Mr. Gatschet holds this divinity to be a nature-god, representing usually the sun, but sometimes the sky. He bears a certain likeness to the primal Aryan deity, whose mythological and ethnological history, as *Dyaus-pitar* (Heaven-father) in India, *Zeus pater* in Greece, and Jupiter in Italy, has been so happily traced and elucidated by Professor Max Müller. Like Zeus and Jupiter, also, in the vulgarizing imaginations of later mythologists, he assumes the form of a man or, in his more comic adventures, of a lower animal. He takes then, in Klamath myths, the typical form of the wise and knowing *skel*, the pine-martin, "which changes its black winter fur to a brown coating in the hot months of the year, and thereby becomes a sort of portent to the Indian." As *Skel-amtch*, "Old Martin," he becomes the hero of as many fanciful legends as those of Zeus in his various animal disguises.

His adopted son, Aishish, is the second and, in some respects, the most interesting figure in the Klamath pantheon. His name signifies "the one secreted," or "concealed," and is given to him in allusion to the manner of his birth, which resembled that ascribed in the Greek myth to Bacchus. In his attributes, Aishish rather recalls the other sons of Zeus, Apollo and Hermes, or the Hindoo Krishna. He is beautiful in appearance, beloved and admired by men, and is the husband of many wives, selected by him among the birds, butterflies, and the smaller quadrupeds. He is a social and friendly deity, and often makes his appearance at festive assemblies for archery and gambling (which is deemed a manly and not degrading sport), when he shows himself unrivalled in these accomplishments. He is finely attired in garments of his own making, ornamented with beads. He is constantly at variance with his reputed father. Mr. Gatschet finds his prototype in the moon. "The moon is the originator of the months, and the progress of the months brings on the seasons, with the new life seen sprouting up everywhere during spring and summer. So the quadrupeds and birds, which are the first to appear after the long winter months, are considered as the wives of Aishish, and the flowers of summer vegetation are the beads of his garments."

The other elementary deities of the Klamaths are mysterious shadowy beings, too dimly defined, in our author's opinion, to deserve the name of gods. Among them are Kaila, the earth; Leméish, the thunder; Yamash and Muash, the north and south winds; and Shukash, the whirlwind. There are mythic stories relating to spirits of the dead, to giants and dwarfs, and to deified animals. But none of them seem to be of much real significance, or to influence greatly the lives of the people. Their mythology, like their traditional history, was cramped in its development by a peculiar superstition, which strictly forbade the utterance of the name of any deceased person. This superstition made the worship of ancestors impossible, limited all thought about a future life, and abolished all historical tradition,—for, as the author pertinently asks, "How can history be told without names?" The Klamath religion, therefore, appears simply as the reverence for certain nature-powers. It has no torturing or mangling rites, like the flesh-piercing and finger-mutilation of the Dakota and Blackfoot tribes, and no grossly immoral and anti-social traits, like some of the Mexican and Peruvian observances.

The belief in a future life, though obscured, is not entirely extinguished by the superstition which has been mentioned. The disembodied soul, now a nameless phantom, hovers for a time about its late abode, and then, rising in the air, follows the sun in its westerly course, till it reaches the spirit-land in the sky, E-eni, or Ayayani, "somewhere near K'múkamtch." "Its arrival there is afterwards revealed by dreams to the mourning relatives, who express in songs what they have seen in their slumbers." There is a guardian, we are told, over the spirits in their passage through the sky, called the Wásh Kmush, or the *gray fox*. "This name is evidently borrowed from the coloring of the sky, as it appears during a polar night, and must be compared to another beast name,

Wán or Wanáka, the *red fox*, which is the symbol of the sun-halo." Not all souls, however, attain the home of the spirits. Of Kmúkamtch we are told, "He provides for mankind whom he has created, but does not tolerate any contravention of his will; for he punishes bad characters by changing them into rocks or by burning them." Thus we find that the Klamath mythology, like the Greek, though in many parts childish, absurd, and inconsistent, had yet, in a certain degree, reached the important point where religion is combined with morality.

Mr. Gatschet promises, in a future volume, some further information concerning the social usages of the Klamath nation. But he adds a few weighty sentences on this subject, which deserve special consideration. "The Klamath Indians," he tells us, "are absolutely ignorant of the gentile or clan system as prevalent among the Haida, Tlingit, and the Eastern Indians of North America. Matriarchate is also unknown among them; every one is free to marry within or without the tribe, and the children inherit from the father." According to certain theories which have been proposed of late years by writers of much eminence, the Klamath nation would appear from these facts to have reached a very high degree of social advancement. It has emerged from the primal and bestial condition of promiscuous intercourse, euphemistically and absurdly styled "communal marriage;" it has passed through the "gentile" organization, and the patriarchal and exogamous stages, and has attained the loftiest grade of the most highly civilized European nations. The recent admirable work of Mr. Edward Westermarck on the "History of Human Marriage" has disclosed the unsubstantial character of the bases on which these fantastic theories were reared. But to get to the root of the matter something further should be said, or rather has been already said, and may here be repeated. In the volume for 1889 of the British Association for the Advancement of Science, I have expressed, in some "Remarks on North American Ethnology," introductory to the excellent report of Dr. Franz Boas on the Indians of British Columbia, the conclusions to which — in common, I think, with most American ethnologists — I have been led by a prolonged study of the tribes of this continent and a comparison of them with other tribes and races. As these conclusions have since been strongly reinforced by the results of the careful investigations of Mr. Gatschet and Dr. Boas, as well as by the comprehensive studies of Dr. Brinton, as set forth in his valuable works on "Races and Peoples" and "The American Race," I may venture to add a summary of them as a fit completion of the present review.

I have urged that "in our studies of communities in the earliest stage we must look, not for sameness, but for almost endless diversity, alike in languages and in social organizations. Instead of one 'primitive human horde' we must think of some three or four hundred primitive societies, each beginning in a single pair or group of children bereft of their parents, and left, in the early settlement of a country, isolated from all kindred and neighbors, each pair or group expanding in their posterity to a people distinct from every other, alike in speech, in character, in mythology, in mode of government, and in social usages. The language may be monosyllabic, like the Khasi and the Paloung; or agglutinative in various methods, like the Mantshu, the Nahuatl, the Eskimo, and the Iroquoian; or inflected, like the Semitic and the Sahaptin. Its forms may be simple, as in the Malayan, the Maya, and the Haida, or complex, as in the Aryan, the Basque, the Algonkian, and the Athapaskan. The old theo-

retical notion, that the more complex and inflected idioms have grown, in the process of ages, out of the simpler agglutinative or monosyllabic forms, must be given up as inconsistent with the results of modern researches.

In like manner, we find among primitive communities every form of government and of social institutions — monarchy among the Mayas and the Natchez, aristocracy among the Iroquoians and the Tshimsians, democracy among the Algonkians and the Shoshonees, descending almost to pure, though perhaps peaceful, anarchy among the Athapascans, the Eskimos, and various other families. In some stocks we find patriarchal (or 'paternal') institutions, as among the Salish and the Algonkian; in others, matriarchal (or 'maternal'), as among the Iroquoian and the Haida. In some the clan-system exists; in others it is unknown. In some exogamy prevails; in others endogamy. In some, women are honored, and have great influence and privileges; in others they are despised and ill-treated. In some, wives are obtained by capture, in others by courtship, in others by the agreement of the parents. All these various institutions and usages exist among tribes in the same stage of culture, and all of them appear to be equally primitive. They are simply the forms in which each community, by force of the special character of its people, tends to crystallize.

We frequently, however, find evidence, if not of internal development, at least of derivation. Institutions, creeds, and customs are in many cases adopted by one stock from another. As there are now 'loan-words' in all languages, so there are borrowed beliefs, borrowed laws, and borrowed arts and usages. Then, also, there are many mixed communities, in which, through the effect of conquest or of intermarriages, the physical traits, languages, or institutions of two or more stocks have become variously combined and intermingled. In short, the study of human societies in the light of their classification by linguistic stocks is like the study of material substances in the light of their classification by the chemical elements. In each case we find an almost infinite variety of phenomena, some primitive and others secondary and composite, but all referable to a limited number of primary constituents: in chemistry, the material elements; in ethnology, the linguistic stocks. Such is the result of the latest investigations, as pursued on the Western Continent, where for the first time a great number of distinct communities, in the earliest social stages, have been exposed to scientific observation, with all their organizations and workings as clearly discernible as those of bees in a glass hive."

It is to be hoped that the Bureau of Ethnology and the British Association will continue their valuable researches and publications on this subject until all the distinct aboriginal stocks which survive in western North America, from Alaska to Lower California, have been as thoroughly studied and their physical and mental traits, languages, mythologies, and social systems made known as completely as this can now be done. From a comparison of the results of these inquiries two important gains to science may be confidently anticipated. (1) It will be made evident — as the facts already adduced in this review sufficiently show — that the physical differences in the varieties of men can be adequately explained by climatic and other local influences, and thus all ground for affirming the existence of several human species, evolved from different sources, will disappear. (2) The "Aryocentric" theory of linguistics and ethnology, which, during the past seventy years, has perverted and hampered those sciences as seriously as the geocentric theory for many centuries perverted and

hampered the science of astronomy, will be utterly demolished. All the special excellences which have been claimed for the speech and mental traits of the Indo-European stock, will be found exemplified in as high degree among some of the American nationalities. The singular opinion which has been maintained by writers of no mean distinction, that the descendants of a barbarous community of nomadic herdsmen who, four or five thousand years ago, wandered over the central plains of Asia and Europe, and, moving southward, gradually gained from Assyrian, Egyptian, and Dravidian sources the elements of culture, are endowed by nature with certain peculiar gifts of intellectual and moral greatness which entitle them to subdue, dominate, regulate, and, if they think proper, entirely suppress and exterminate any alien community that comes in their way, will be found to be as directly opposed to scientific truth as it is to the first principles of humanity and justice.

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THE LAFAYETTE GRAVELS.

PRESIDENT CHAMBERLIN, accompanied by Professor R. D. Salisbury, has spent the holidays in the south and southwest, examining the beds of gravel and sand called by Dr. Hilgard the "Orange Sand," but recently renamed by him "Lafayette." The same beds have also been called "Appomattox" by Mr. McGee. The party went first into the north-western part of Alabama and adjacent parts of Mississippi, where this formation, as well as an older one composed of very similar materials, is seen in great force. This older formation is the Tuscaloosa of the Alabama survey, equivalent to the Potomac of the Middle States. From Sheffield they went across to Columbus, Ga., where they were joined by Mr. W. J. McGee. At Columbus the same two formations are admirably exposed, as well as a third, a division of the Columbia formation of Mr. McGee, the "River Terrace" of the Alabama survey.

From Columbus the party came to Montgomery, where the Lafayette gravels and sands are to be seen in contact with the sands of the Eutaw division of the Cretaceous. From Montgomery they went to Tuscaloosa, where they were met by Dr. Smith and spent a day in examining the beautiful exposures of the Tuscaloosa and Lafayette formations in the railroad cuts at Cottdale, at Box Spring, and in the gullies of the town of Tuscaloosa. Sir Charles Lyell, in describing the geological formations at Tuscaloosa, says: "The lower beds of the horizontal Cretaceous series in contact with the inclined coal measures, consist of gravel, some of the quartzose pebbles being as large as hens' eggs, and they look like an ancient beach, as if the Cretaceous sea had terminated here, or shingle had accumulated near a shore."¹

Professor Tuomey afterwards showed that these pebble beds belonged to a much more recent formation, for he traced them southward and found them overlying the Tertiary rocks of the lower part of the State.²

As a matter of fact, both the Cretaceous (if the Tuscaloosa or Potomac shall prove to be Cretaceous, as seems most probable) and the Post-Eocene deposits are exposed in the gullies cut in the slopes of the hill towards the river in Tuscaloosa. All the large gravel belongs, however, in all probability, to the later formation, which we now call Lafayette, while the underlying stratified clays and cross-bedded sands are of older date, the clays containing many

plant remains which fix the age as probably Cretaceous. It thus seems that Sir Charles Lyell was mistaken in his identification of the gravel beds as Cretaceous, while Professor Tuomey, though undoubtedly correct in his classification of the gravel and overlying red loam, did not discriminate between these and the underlying laminated clays and cross-bedded sands, which were first clearly distinguished in Alabama by Harper and Winchell, and afterwards described in detail by Smith and Johnson in 1883 and following years.³

The age of these later gravels has lately become matter for difference of opinion among geologists. Professor Tuomey thought that they belonged to the Drift, though having but few points of resemblance to that formation at the north. Dr. Hilgard also has always considered them as belonging to the Quaternary, and, more or less remotely, of glacial origin. Messrs. McGee and Chamberlin, on the other hand, consider them much older than the Quaternary, and as probably Pliocene, because of their occurrence beneath beds which these geologists consider the very oldest of the Quaternary series. The vigorous manner in which the study of this formation is being pushed in widely-separated parts of the United States, leads us to hope that these differences of opinion will soon be reconciled.

From Tuscaloosa the party went westward to Vicksburg, Natchez, and other points on the great river, where the same gravel beds are exposed in contact with the overlying Port Hudson and Loess of unquestioned Quaternary age. From New Orleans the party will return to their homes.

E. A. S.

ARTIFICIAL LANGUAGES.

THE enthusiasm for the creation of new international languages was at its height a few years ago, but is by no means over. The too well-known *Volapük* is probably the best of them, and has set the stone rolling; it tries to combine the peculiar, especially phonetic, features of most European languages. It is doing good work as a medium of commercial correspondence, but probably will never be adopted as a medium for conversation, and through the agency of time is subjected, like other languages, to phonetic and many other changes. Some attempts dating from 1891 have adopted the principle of uniting the elements of the Romance languages only into a new form of speech. "Un lingua internazionale" was composed by Julius Lott in Vienna (Springergasse 32); "Un lingue commun pro le cultivat nazione" by Dr. Alberto Liptay and "fixed up" for Spanish, French, and German speaking people; another, perhaps the most consistent in its principle, is "Nov Latin," by Dr. Rosa of Turin. A passage taken from Lott's "Suplent folie" reads as follows: "Le doktes inter si pote usare le historik ortografie, ma le homo de komercie ese saep in dubie en use de dublkonsonantes. Sin perditte pro le klarité noi pote tolerare le skripzion; gramatik pro grammatika, etc. In il question le majorité averé le decision." In reading this sort of jargon we cannot help asking ourselves, Would it not be greatly preferable to use plain French or Italian to make oneself understood?

Another more elaborate "Attempt towards an International Language" was written by Dr. Esperanto of Warsaw, Russia, and translated into English by Henry Phillips, Jun. (New York, Holt, 1889. 56 p. 8°). It combines radical elements of the Germanic and the Romance languages, and tends to put into reality the principle, that "a language

¹ "Travels in the United States, Second Visit," Vol. II., p. 68 (Harper & Bro.).

² "First Biennial Report on the Geology of Alabama," p. 160.

³ Bulletin No. 43, U. S. Geol. Surv., "On the Tertiary and Cretaceous Strata of the Tuscaloosa, Tombigbee, and Alabama Rivers."